A. METZ.
Scaffold.

No. 216,433. Patented June 10, 1879.

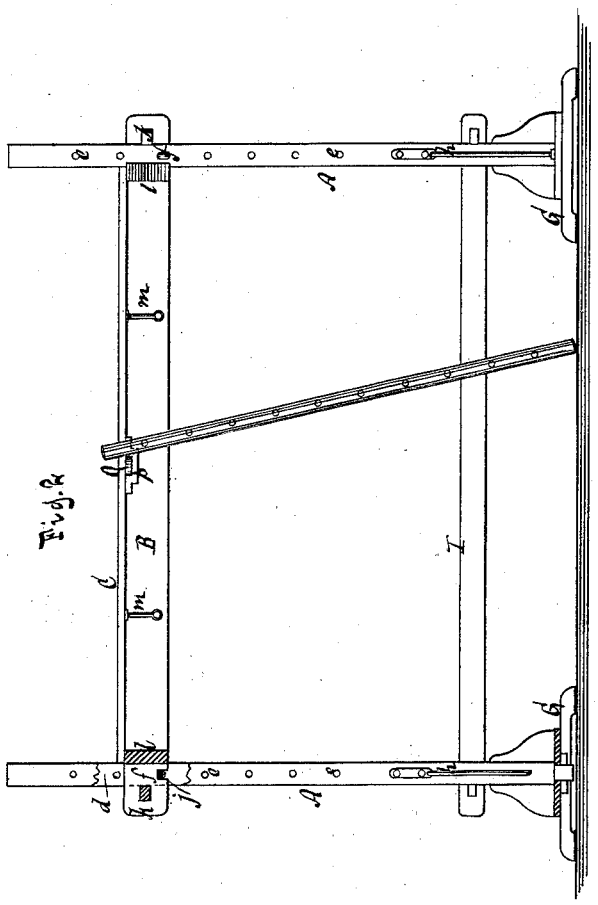

Fig. 2.

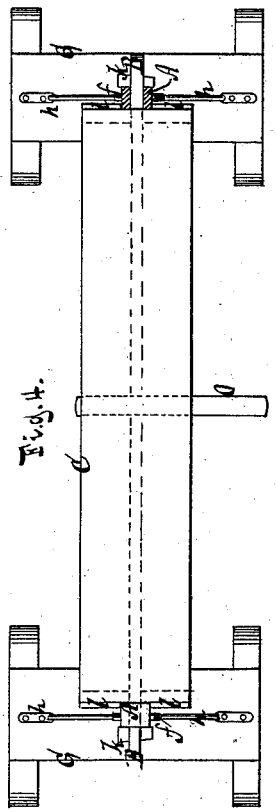

Fig. 4.

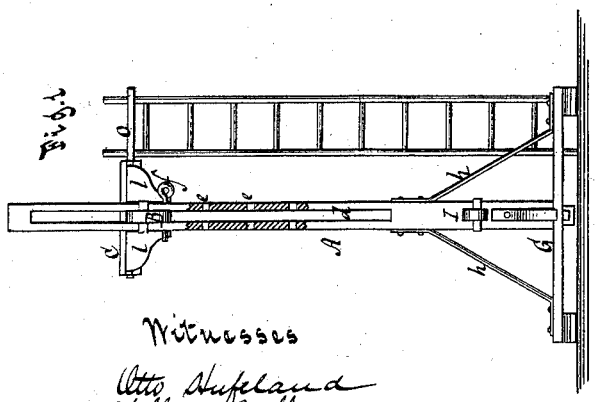

Fig. 1.

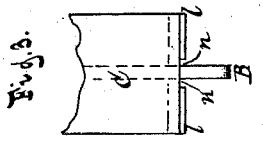

Fig. 3.

Witnesses
Otto Hufeland
William Miller

Inventor
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by Van Santvoord & Hauff
his attorneys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALBERT METZ, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN SCAFFOLDS.

Specification forming part of Letters Patent No. **216,433**, dated June 10, 1879; application filed April 16, 1879.

To all whom it may concern:

Be it known that I, ALBERT METZ, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Scaffolds, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents an end view, partly in section, of a scaffold embodying my invention. Fig. 2 is a side view thereof, partly in section. Fig. 3 shows a portion of the platform in top view. Fig. 4 is a plan or top view of the apparatus, partly in section.

Similar letters indicate corresponding parts.

My invention relates to the construction of scaffolds for use by painters and others, with a view to their being readily set up and taken apart, and to their being adjusted to different heights and lengths; and it consists in certain novel combinations of parts, hereinafter described, and pointed out in the claims.

The letter A designates two uprights supporting a beam, B, upon which rests the platform or stand C for the materials and workmen.

The uprights A are each provided with a row of holes, *e*, one of which contains a bolt or pin, *f*. At their lower ends the uprights A are each detachably joined to a foot, G, and steadied by means of braces *h*, while near their lower ends the two uprights are connected together by a detachable joist, I, the ends of this joist being mortised in the uprights.

The end parts of the beam B are fitted to the slots *d* of the uprights, and in the lower edge of the beam are formed two notches, *j*, (see Fig. 2,) one near each end, the size of these notches being equal to the thickness or diameter of the bolts *f*.

In putting up my scaffold, the bolts *f* are, respectively, inserted in a hole at the desired height, and the ends of the beams B are thrust into the slots *d* of the upright in such a manner that the notches *j* engage or drop over the bolts. In this position the beam B is firmly supported and held against longitudinal displacement, while it is adapted to be adjusted to a higher position, or to be dismembered from the uprights, without removing the bolts.

The ends of the beam B are arranged to project beyond the uprights A, and immediately next to the uprights they are provided with mortises to receive wedges *k*.

The platform C is fastened to the beam B at its opposite ends through the medium of brackets *l*, braces *m* being also usually arranged between the ends thereof. The brackets *l* are arranged on opposite sides of the beam B at each end of the platform, and they are made to project beyond the ends of the platform on one of their sides, while in the inner edge of such projecting side of each bracket is formed a rabbet, *n*. (See Fig. 3.) By this means the brackets *l* are adapted to lap over the edges of the uprights A, as shown in Figs. 2 and 4, and those portions of the uprights forming the sides of the slots *d* are re-enforced against lateral strain.

When it is desired to shorten or lengthen my scaffold, the beam B, together with the platform, is removed, and a beam of similar construction, but of different length, is substituted therefor, the joist I being also changed when this joist is used.

With the platform C is combined a laterally-projecting bar, *o*, against which the upper part of a ladder may be allowed to rest, as indicated, when the ladder is sustained in a position at right angles to the platform. This bar *o* is clasped by straps *p*, fastened to the bottom of the platform C, and slides in said straps, so that it is adjustable and detachable.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the slotted uprights, each having a row of holes to receive a bolt, of a beam the ends of which are fitted in the slots of the uprights, with shoulder-bearings against the same, and mortised at their projecting ends to receive wedges, said beam having in its lower edge notches which sit over the said bolts, whereby all longitudinal movement of the beam is prevented, and the wedges serve also as guides in adjust-

ing the same, substantially as shown and described.

2. In a scaffold, the combination, with slotted uprights, of a beam the ends of which are fitted to the slotted uprights and supported therein, and a platform fastened to said beam at each end by means of brackets which are constructed to lap over the edges of the uprights, substantially as described and for the object specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 9th day of April, 1879.

ALBERT METZ. [L. S.]

Witnesses:
W. HAUFF,
CHAS. WAHLERS.